

**REMARKS**

Claims 1-66 are currently pending in the application. No claims have been amended or canceled. Applicant respectfully requests reconsideration of the application in view of the following remarks.

Claims 1-66 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,548,836 to Taromaru ("Taromaru"). Independent claim 1 relates to a method of optimizing switched diversity. Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of independent claim 1, namely, determining a rate of change of strength values of a received signal of a first branch as a function of time and comparing a magnitude of the rate of change to a threshold.

Taromaru discloses a diversity receiver used for radio communications. The diversity receiver includes an averaging circuit for producing a short-time average value of an instantaneous value of a receiving electric field intensity at a receiving section. A read-only memory (ROM) produces an appropriate threshold value corresponding to the short-time average value from an averaging circuit. A threshold decision circuit compares the threshold value produced from the ROM with the instantaneous value of the receiving electric field intensity and controls an antenna switch to switch antennas when the instantaneous value decreases below the threshold value.

In contrast to independent claim 1, in Taromaru, a threshold decision circuit compares an instantaneous value of a received electric field intensity of a radio wave based on a traveling speed of a mobile unit with a threshold value. However, the comparison is not based on a magnitude of a rate of change of strength values of a received signal as in claim 1. Applicant respectfully submits that claim 1 is distinguishable over Taromaru and is in condition for allowance. Withdrawal of the rejection of independent claim 1 as anticipated by Taromaru is respectfully requested.

Dependent claims 2-11 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 2-11 distinguish over

Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 2-11 is respectfully requested.

In addition, Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of dependent claim 2, namely, wherein each branch comprises a carrier. The cited reference of Taromaru only discloses antenna diversity. Taromaru discloses a plurality of antennas and an antenna switch for selectively producing one of the outputs of the antennas. However, Taromaru fails to teach or suggest each branch comprising a carrier as in dependent claim 2. Applicant respectfully submit that dependent claim 2 distinguishes over Taromaru and is in condition for allowance. Withdrawal of the rejection of dependent claim 2 as anticipated by Taromaru is respectfully requested.

Independent claim 12 relates to a method of optimizing switched diversity. Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of independent claim 12, namely, determining a rate of change of strength values of a received signal of a first branch operating at a first modulation scheme as a function of time and comparing a magnitude of the rate of change to a threshold.

In contrast to independent claim 12, in Taromaru, a threshold decision circuit compares an instantaneous value of a received electric field intensity of a radio wave based on a traveling speed of a mobile unit with a threshold value. However, the comparison is not based on the magnitude of the rate of change of strength values of the received signal as in claim 12. Applicant respectfully submits that claim 12 is distinguishable over Taromaru and is in condition for allowance. Withdrawal of the rejection of independent claim 12 as anticipated by Taromaru is respectfully requested.

Dependent claims 13-22 depend from and further restrict independent claim 12 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 12, dependent claims 13-22 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 13-22 is respectfully requested.

In addition, Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of dependent claims 18 and 22, namely, wherein a threshold is a function of modulation and coding. In Taromaru, a threshold is based upon a signal-to-noise ration (SNR). However, Taromaru fails to teach or suggest that the threshold is a function of modulation and coding as in dependent claims 18 and 22. Applicant respectfully submit that dependent claims 18 and 22 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 18 and 22 as anticipated by Taromaru is respectfully requested.

Independent claim 23 relates to an apparatus for optimizing switched diversity. Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of independent claim 23, namely, means for determining a rate of change of strength values of a received signal of a first branch as a function of time and means for comparing a magnitude of the rate of change to a threshold. In contrast to independent claim 23, in Taromaru, a threshold decision circuit compares an instantaneous value of a received electric field intensity of a radio wave based on a traveling speed of a mobile unit with a threshold value. However, the comparison is not based on the magnitude of the rate of change of strength values of the received signal as in claim 23. Applicant respectfully submits that claim 23 is distinguishable over Taromaru and is in condition for allowance. Withdrawal of the rejection of independent claim 23 as anticipated by Taromaru is respectfully requested.

Dependent claims 24-33 depend from and further restrict independent claim 23 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 23, dependent claims 24-33 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 24-33 is respectfully requested.

In addition, Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of dependent claim 25, namely, wherein each branch comprises a carrier. The cited reference of Taromaru only discloses antenna diversity. Taromaru discloses a plurality of antennas and an antenna switch for selectively producing one of the outputs of the antennas. However, Taromaru fails to teach or suggest each branch comprising a carrier as in dependent claim 25. Applicant respectfully submit that dependent

claim 25 distinguishes over Taromaru and is in condition for allowance. Withdrawal of the rejection of dependent claim 25 as anticipated by Taromaru is respectfully requested.

Additionally, Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of dependent claims 29 and 33, namely, wherein a threshold is a function of modulation and coding. In Taromaru, a threshold is based upon a signal-to-noise ration (SNR). However, Taromaru fails to teach or suggest that the threshold is a function of modulation and coding as in dependent claims 29 and 33. Applicant respectfully submit that dependent claims 29 and 33 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 29 and 33 as anticipated by Taromaru is respectfully requested.

Independent claim 34 relates to a method of optimizing switched diversity. Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of independent claim 34, namely, determining a rate of change of strength values of a received signal of a first branch operating at a first coding scheme as a function of time and comparing a magnitude of the rate of change to a threshold.

In contrast to independent claim 34, in Taromaru, a threshold decision circuit compares an instantaneous value of a received electric field intensity of a radio wave based on a traveling speed of a mobile unit with a threshold value. However, the comparison is not based on the magnitude of the rate of change of strength values of the received signal as in claim 34. Applicant respectfully submits that claim 34 is distinguishable over Taromaru and is in condition for allowance. Withdrawal of the rejection of independent claim 34 as anticipated by Taromaru is respectfully requested.

Dependent claims 35-44 depend from and further restrict independent claim 34 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 34, dependent claims 35-44 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 35-44 is respectfully requested.

Additionally, Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of dependent claims 40 and 44, namely, wherein a threshold is a function of modulation and coding. In Taromaru, a threshold is based upon a signal-to-noise ration (SNR). However, Taromaru fails to teach or suggest that the threshold is a function of modulation and coding as in dependent claims 40 and 44. Applicant respectfully submit that dependent claims 40 and 44 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 40 and 44 as anticipated by Taromaru is respectfully requested.

Independent claim 45 relates to an apparatus for optimizing switched diversity. Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of independent claim 45, namely, means for determining a rate of change of strength values of a received signal of a first branch operating at a first modulation scheme as a function of time and means for comparing a magnitude of the rate of change to a threshold. In contrast to independent claim 45, in Taromaru, a threshold decision circuit compares an instantaneous value of a received electric field intensity of a radio wave based on a traveling speed of a mobile unit with a threshold value. However, the comparison is not based on the magnitude of the rate of change of strength values of the received signal as in claim 45. Applicant respectfully submits that claim 45 is distinguishable over Taromaru and is in condition for allowance. Withdrawal of the rejection of independent claim 45 as anticipated by Taromaru is respectfully requested.

Dependent claims 46-55 depend from and further restrict independent claim 45 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 45, dependent claims 46-55 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 46-55 is respectfully requested.

Additionally, Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of dependent claims 50 and 55, namely, wherein a threshold is a function of modulation and coding. In Taromaru, a threshold is based upon a signal-to-noise ration (SNR). However, Taromaru fails to teach or suggest that the threshold is a function of modulation and coding as in dependent claims 50 and 55. Applicant respectfully

submit that dependent claims 50 and 55 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 50 and 55 as anticipated by Taromaru is respectfully requested.

Independent claim 56 relates to an apparatus for optimizing switched diversity. Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of independent claim 56, namely, means for determining a rate of change of strength values of a received signal of a first branch operating at a first coding scheme as a function of time and means for comparing a magnitude of the rate of change to a threshold. In contrast to independent claim 56, in Taromaru, a threshold decision circuit compares an instantaneous value of a received electric field intensity of a radio wave based on a traveling speed of a mobile unit with a threshold value. However, the comparison is not based on a magnitude of a rate of change of strength values of a received signal as in claim 56. Applicant respectfully submits that claim 56 is distinguishable over Taromaru and is in condition for allowance. Withdrawal of the rejection of independent claim 56 as anticipated by Taromaru is respectfully requested.

Dependent claims 57-66 depend from and further restrict independent claim 56 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 56, dependent claims 57-66 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 57-66 is respectfully requested.

Additionally, Applicant respectfully submits that Taromaru fails to teach or suggest at least one of the distinguishing features of dependent claims 62 and 66, namely, wherein a threshold is a function of modulation and coding. In Taromaru, a threshold is based upon a signal-to-noise ration (SNR). However, Taromaru fails to teach or suggest that the threshold is a function of modulation and coding as in dependent claims 62 and 66. Applicant respectfully submit that dependent claims 62 and 66 distinguish over Taromaru and are in condition for allowance. Withdrawal of the rejection of dependent claims 62 and 66 as anticipated by Taromaru is respectfully requested.

In view of the above remarks, Applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

By 

Ross T. Robinson

Registration No.: 47,031

JENKENS & GILCHRIST, A PROFESSIONAL  
CORPORATION

1445 Ross Avenue, Suite 3200

Dallas, Texas 75202

(214) 855-4500

Attorneys For Applicant